WHAT IS CLAIMED IS:

1. A surface acoustic wave substrate comprising:

a piezoelectric or electrostrictive substrate having large electromechanical coupling coefficient; and

a thin film formed on said substrate and having variation characteristics of frequency of a surface acoustic wave relative temperature variation opposite to that of said substrate,

wherein said substrate is a $LiNbO_3$ substrate having a cut angle of rotated Y plate within a range greater than or equal to -10° and smaller than or equal to +30° and propagating a piezoelectric leaky surface wave having a propagation velocity higher than that of a Rayleigh type surface acoustic wave along X-axis direction or within a range of ±5° with respect to X-axis direction, and

a value of H/λ falls within a range from 0.05 to 0.35, where H is the film thickness of said thin film, and λ is the wavelength of operating center frequency of said piezoelectric leaky surface wave.

2. A surface acoustic wave substrate as set forth in claim 1, wherein the cut angle of rotated Y plate of said substrate is in a range greater than or equal to 0° and smaller than or equal to +20°, and the value of H/λ falls within a range from 0.1 to 0.35.

3. A surface acoustic wave substrate as set forth in claim 1, wherein the cut angle of rotated Y plate of said substrate is in a range greater than or equal to +20° and smaller than or equal to +30°, and the value of H/λ falls within a range from 0.15 to 0.35.

4. A surface acoustic wave substrate as set forth in claim 1, wherein the temperature coefficient of frequency (TCF) as measured at 25°C is in a range from -30 ppm/°C to +30 ppm/°C.

5. A surface acoustic wave substrate as set forth in claim 4, wherein the electromechanical coupling coefficient k^2 of said piezoelectric leaky surface wave is greater than or equal to 0.155 and the electromechanical coupling coefficient k_R^2 of a Rayleigh wave component is smaller than or equal to 0.01.

6. A surface acoustic wave substrate as set forth in claim 5, wherein the cut angle of rotated Y plate of said substrate is in a range greater than or equal to -10° and smaller than or equal to -5°, and the value of H/λ falls within a range from 0.07 to 0.31.

7. A surface acoustic wave substrate as set forth in claim 5, wherein the cut angle of rotated Y plate of said substrate

is in a range greater than or equal to -5° and smaller than or equal to +10°, and the value of H/λ falls within a range from 0.115 to 0.31.

8. A surface acoustic wave substrate as set forth in claim 5, wherein the cut angle of rotated Y plate of said substrate is in a range greater than or equal to +10° and smaller than or equal to +15°, and the value of H/λ falls within a range from 0.16 to 0.31.

9. A surface acoustic wave substrate as set forth in claim 5, wherein the cut angle of rotated Y plate of said substrate is in a range greater than or equal to +15° and smaller than or equal to +20°, and the value of H/λ falls within a range from 0.2 to 0.31.

10. A surface acoustic wave substrate as set forth in claim 5, wherein the cut angle of rotated Y plate of said substrate is in a range greater than or equal to +200 and smaller than or equal to +30°, and the value of H/λ falls within a range from 0.25 to 0.31.

11. A surface acoustic wave functional element comprising a surface acoustic wave substrate as set forth in any one of claims 1 to 10, the element including:

an exciting or receiving region having an interdigital electrode for exciting or receiving the piezoelectric leaky surface wave formed at an interface between the surface of said substrate and said thin film; and

a propagating region having a structure for electrically shorting between said substrate and said thin film or a shorting type grating electrode structure formed at an interface between the surface of said substrate and said thin film.

12. A surface acoustic wave functional element comprising a substrate including: a piezoelectric or electrostrictive substrate having large electromechanical coupling coefficient; and a thin film formed on said substrate and having variation characteristics of frequency of a surface acoustic wave relative temperature variation opposite to that of said substrate,

wherein said substrate is a $LiNbO_3$ substrate having a cut angle of rotated Y plate within a range greater than or equal to $-10°$ and smaller than or equal to $+30°$ and propagating a piezoelectric leaky surface wave having a propagation velocity higher than that of a Rayleigh type surface acoustic wave along X-axis direction or within a range of $\pm 5°$ with respect to X-axis direction, and

a value of H/λ falls within a range from 0 to 0.35 in an exciting or receiving region, and within a range from 0.05

to 0.35 in a propagating region, where H is the film thickness of said thin film, and λ is the wavelength of operating center frequency of said surface acoustic wave.

13. A surface acoustic wave functional element as set forth in claim 12, wherein said exciting or receiving region has an interdigital electrode for exciting or receiving the piezoelectric leaky surface wave formed at an interface between the surface of said substrate and said thin film; and

said propagating region has a structure for electrically shorting between said substrate and said thin film or a shorting type grating electrode structure formed at an interface between the surface of said substrate and said thin film.

14. A surface acoustic wave functional element as set forth in claim 12 or 13, wherein the electromechanical coupling coefficient k^2 of said piezoelectric leaky surface wave is greater than or equal to 0.155 in said exciting or receiving region, and the temperature coefficient of frequency (TCF) as measured at 25°C is in a range from -30 ppm/°C to +30 ppm/°C in said propagating region.

15. A surface acoustic wave functional element as set forth in claim 11, wherein said interdigital electrode is made of one metal selected from the group consisting of Al, Cu, Ti,

W, Mo, Cr, Au and Ag or a combination or alloy of two or more metals thereof.

16. A surface acoustic wave functional element as set forth in claim 11, wherein said propagating region is provided with a conductive layer made of one metal selected from the group consisting of Al, Cu, Ti, W, Mo, Cr, Au and Ag or a combination or alloy of two or more metals thereof, as the structure for electrically shorting between said substrate and said thin film.

17. A surface acoustic wave functional element as set forth in claim 13, wherein said interdigital electrode is made of one metal selected from the group consisting of Al, Cu, Ti, W, Mo, Cr, Au and Ag or a combination or alloy of two or more metals thereof.

18. A surface acoustic wave functional element as set forth in claim 13, wherein said propagating region is provided with a conductive layer made of one metal selected from the group consisting of Al, Cu, Ti, W, Mo, Cr, Au and Ag or a combination or alloy of two or more metals thereof, as the structure for electrically shorting between said substrate and said thin film.